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69. Carp, River Carpsucker, Smallmouth Buffalo, and Bigmouth Buffalo in Lewis and Clark Lake, Missouri River, by Charles H. Walburg and William R. Nelson. 1966. 30 p.
70. Trout Hepatoma Research Conference Papers, edited by John E. Halver and Ian A. Mitchell. 1967. 199 p.
71. A Review of Fishery Studies on Missouri River Main Stem Reservoirs, by Norman G. Benson. In press.
72. Bibliography on the Blood Chemistry of Fishes, by Joseph B. Hunn. 1967. 32 p.

BIBLIOGRAPHY ON THE BLOOD CHEMISTRY OF FISHES

Joseph B. Hunn

RESEARCH REPORT 72

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BIBLIOGRAPHY ON THE BLOOD CHEMISTRY OF FISHES

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Abstract.—More than 850 references on the chemistry of fish blood are listed as a guide to the widely scattered literature on the subject.

Anyone seeking a range of "normal" values for fish blood chemistry finds that standard reference sources such as Biological Handbooks—Blood and Other Body Fluids provide little data. A search of literature, starting from scratch, leads to spending an amount of time disproportionate to the information gathered. The only guide to this widely scattered literature is that of Hunn (1959, 1960) who brought together most of the pertinent fish blood chemistry references. This bibliography includes those references.

It is evident from these references that there are few data on fish with a known history (age, sex, nutritional state, etc.). Hopefully, gaps of this nature will stimulate further work to provide a rather complete set of ranges of "normal" blood chemistry values for various species of fish. Information of this nature is essential in attempting to evaluate physiological responses of fish to changes in their environment, and it is also applicable in pharmacological and toxicological testing programs where fish are used as the test animals.

Of necessity, many articles listed were not read by the author, and reference sources are indicated where appropriate. Abbreviations of the reference sources appearing in the bibliography are as follows:

B.A.—Biological Abstracts.
B.T.—Bioresearch Titles.
C.A.—Chemical Abstracts.
C.C.—Current Contents of Chemical Pharmaco and Life Sciences.
C.L.M.I.—Current List of Medical Literature (now Index Medicus).
E.T.F.L.—English Translations of Fishery Literature (U.S.F.W.S. Spec. Sci. Rept. Fisheries nos. 176, 227, and 264).
F.O.T.—Fishery and Oceanography Translations.
I.A.—International Abstracts of Biological Sciences.
I.M.—Index Medicus.
S.F.A.—Sport Fishery Abstracts.
Z.R.—Zoological Record.

Those unfamiliar with abbreviations of journal titles used in the bibliography or seeking the complete journal titles should consult the following:

Chemical Abstracts List of Periodicals 1961 with Supplements for 1962, 1963, and 1964 published by Chemical Abstracts Service.

January issue of Index Medicus contains list of journals indexed with abbreviations used.

Biological Abstracts November 1, 1965, 46-(21): 7387–7430 for list of journals abstracted.

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During 1966 at least two of the titles of journals cited have changed, they are C. R. Acad. Sci., Paris, which is now *C*omptes *R*endus *Acad*emie *Sc*ience *Se*rie *D.*, Sciences Naturelles, and the J. Cell. Comp. Physiol. now the Journal of *Cell*ular *Physiol*ogy.

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